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**SOIL VAPOR
INVESTIGATION REPORT
(REVISED)**

**Magna Metals Site
Cortlandt, New York**

Project Number: 40256

July 2007

Magna Metals Site
NYSDEC Site No. 360003
CORTLANDT, NEW YORK

Soil Vapor Investigation Report (Revised)

AKRF Project Number: 40256

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1.0 INTRODUCTION

Investigation at the Magna Metals Site, located in Cortlandt, New York, has been conducted to comply with a New York State Department of Environmental Conservation's (NYSDEC) Consent Order (Site No. 360003). In June 2006, Tetra Tech EC, Inc. (TTI) submitted a letter report to the NYSDEC that summarized the results of soil vapor sampling and additional groundwater sampling. In November 2006, the NYSDEC issued a correspondence requiring sampling of the office/warehouse building located east of the former Magna Metals building to confirm that soil vapor intrusion is not occurring. This report documents the collection of sub-slab soil vapor samples and air samples to satisfy the NYSDEC requirements.

2.0 SITE DESCRIPTION

2.1 Site Location

The Magna Metals site is located in the Town of Cortlandt, Westchester County, New York, near the intersection of Furnace Dock Road and Maple Avenue. A site location map is included in Figure 1. Nearby towns include Peekskill and Croton-on-Hudson, and the Hudson River is located 3 miles west of the site.

2.2 Site and Vicinity Characteristics

Locally, the site is part of a larger commercial property owned by Baker Properties, having several operating businesses which currently include Polymedco, Inc., Motion Labs, Inc., and International Purchasing Systems. The office/warehouse building was reported by the owner to include some manufacturing activities. Baker Properties acquired the property from ISC Properties, Inc. (ISCP) in 1982, and has leased it to various tenants. The identity of these tenants, their use of the property, and their waste disposal practices are unknown. The Croton Egg Farm and an inactive emery mine are located to the west and to the north-northwest of the site, respectively. To the north, south, and east of the project site are residential areas. A wetland area is located between the site and the residential area southwest of the site.

2.3 Site Geology, Hydrogeology and Subsurface Characteristics

Topography is variable throughout the 0.5-mile radius from the site. Elevations range from 300 to 600 feet above mean sea level (MSL). On the former Magna Metals site, topography ranges from 360 feet MSL along the eastern site boundary to 320 feet MSL along the western site boundary. Stormwater drainage flows towards the west, following site topography, and drains into an unnamed tributary to Furnace Brook. The tributary flows south/southwest and discharges into a pond located in a large wetland area.

Stormwater on the former Magna Metals site leaves the site via overland flow and enters into the unnamed tributary. One catch basin was observed by TTI on the former site property. This basin is located in the central western portion of the site and collects discharge water from a roadway/parking area. The roadway is a mix of gravel and pavement. A search for the catch basin's outfall pipe was conducted along the unnamed tributary. An outfall pipe was not located. The stormwater collection system on Furnace Dock Road discharges into the unnamed tributary near the intersection of Furnace Dock Road and Gilman Lane.

The geologic characteristics of the subsurface conditions at the site consist primarily of a sandy to silty sand overburden unit, approximately 10 to 20 feet thick, overlying bedrock. The bedrock is mapped by the New York State Museum and Science Service as Hornblende Norite, which is a

part of the Cortlandt Mafic Complex. Overburden groundwater exists in the form of a very shallow overburden aquifer (i.e., typically less than five feet in thickness). Groundwater flow from the site is in the western direction towards the stream and wetland area.

Results of the slug tests completed by TTI indicate a range in hydraulic conductivity values from 5.3×10^{-5} cm/sec (or 0.16 ft/day) at MW-1 in the higher portion of the site to 2.2×10^{-3} cm/sec (6.2 ft/day) at MW-3 in the lower portion of the leach pit area. Previous groundwater sampling by TTI indicates that some monitoring wells were observed to be dry during seasonal low groundwater conditions.

2.4 Review of Site History

Metal plating, polishing, and lacquering operations were conducted at the Magna Metals site from 1955 to 1979. During operation, iron, lead, copper, nickel, and zinc chlorides, cyanides, and sulfates were discharged to a series of leaching pits. Spent trichloroethylene (TCE) was drummed and removed.

2.5 Previous Studies

Between 1978 and 1984, site investigations were completed by the New York State Department of Health (NYSDOH), the NYSDEC, and William Cosulich to determine if property uses had resulted in contamination. The investigations concluded that soil, groundwater, sediment, and, surface water contamination existed at the site.

In 1998, Foster Wheeler Environmental Corporation (predecessor to TTI) prepared a Remedial Investigation/Feasibility Study (RI/FS) to delineate the nature and extent of leach pit/septic tank/holding tank, surface water, sediment, surface soil, subsurface soil, and groundwater contamination at the site, such that an evaluation of (1) the nature and extent of site contamination, (2) the potential impacts, if any, and (3) the remedial measure options could be performed. The field investigation program consisted of the drilling of soil borings, the installation and development of monitoring wells, the performance of a habitat-based assessment, and the sampling and analysis of various environmental media including septic tank/leach pit sludge and water, surface soil, subsurface soil, surface water, sediment, and groundwater. A geophysical survey was added to the field investigation to improve location accuracy of the leach pit/septic tank/holding tank sampling.

In 2004, TTI completed a Draft Supplemental RI/FS to perform horizontal and vertical delineation of the soil and groundwater contamination in the potential source area of the site, the leach pit area. The investigation included a geophysical and excavation survey to locate leach pits, leach pit excavation, a homeowner well survey, installation of overburden monitoring wells and a bedrock monitoring well, and collection of soil, groundwater, surface water and sediment samples. Based on the data compiled in the supplemental investigation, TTI concluded the following:

- Concentrations and distributions of contaminant compounds and analytes detected during the Supplemental RI are consistent with contaminant concentrations and distributions detected during previous investigations.
- Xylenes, semivolatile organic compounds (SVOCs), and metals were detected in leach pit sludge samples. Xylenes were detected in soil samples collected below the leach pits
- TCE was detected in the groundwater sample collected from MW-04 and MW-04D.
- Media sampled were affected by inorganic contaminants of concern at concentrations above soil cleanup criteria. In particular, chromium, copper, mercury, nickel, and zinc are

potentially site related compounds that were detected at concentrations exceeding applicable criteria.

- Thirteen leach pits/septic pits had been discovered at the Magna Metals site.
- There appeared to have been two phases of leach pit/septic tank construction at the site. The first and older set of leach pits was constructed of concrete cinder blocks with a soil or gravel bottom. The second phase of leach pits was constructed of prefabricated concrete cylinders with perforated sides and apparently soil or gravel bottoms. Sludge or sludge cakes were still present in twelve of the thirteen pits at the site.
- Based on inorganic analytical results (particularly copper) for the surface water, groundwater, and surface soil samples collected downgradient of the leach pit area and the former Magna Metals building, it appeared that the wetlands east of Furnace Brook and the unnamed tributary may have been impacted by contaminated groundwater or surface runoff originating in the vicinity of the leach pit area and site building.
- Impacts to pelagic and benthic aquatic life were observed in indigenous and laboratory based analyses. The primary environmental media of concern were surface waters and sediments of Furnace Brook, its unnamed tributary, and the palustrine wetlands associated with the site.

In 2006, TTI completed an additional investigation, which included the collection of groundwater samples from existing wells, two new wells next to the former Magna Metals building, MW9 and MW10 and an additional new well, MW 11, approximately 200 feet north of the former Magna Metals building. Soil vapor samples were also collected from three exterior locations along western side of office/warehouse building, five exterior locations within the area containing the leach pits, and one interior sub-slab sample from the building south of the Magna Metals building and the office/warehouse building.

The sampling results indicated that groundwater collected from the two new monitoring wells did not contain contaminants above NYSDEC water quality standards and the overall samples were consistent with previous data, including 190 ppb of TCE detected in MW11. The soil gas sample results documented that VOCs were detected at concentrations ranging from 1 to 1,900 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). A site map showing the soil gas sampling locations and the laboratory sampling results is included as Figure 2. TTI concluded that the sampling results were consistent with the findings of the current and previous sampling and did not indicate there were unknown sources.

In November 2006, the NYSDEC issued correspondence requiring the sampling of sub-slab soil vapor from the on-site office/warehouse building to the east of the Magna Metals building to confirm that soil vapor intrusion was not occurring. This was in response to a TCE concentration of 59 micrograms per cubic meter in one soil vapor sample (SV-03) that was collected next to the office/warehouse building.

3.0 FIELD PROGRAM

The objectives of the field-sampling program were to confirm whether or not soil vapor intrusion is occurring in office/warehouse building located east of the former Magna Metals building. The field procedures and sampling activities were completed in accordance with NYSDOH's requirements (NYSDOH, 2006). The field program is outlined in Section 3.1, and the subsequent sections give the summary of sampling implementation. The field program was conducted in accordance with the detailed methodologies described in the NYSDEC approved Soil Vapor Investigation Work Plan (SVIWP)

3.1 Field Program Summary

Site access for the property and study building was agreed upon between ISCP and the property owner/manager through a signed access agreement. Sub-slab soil-gas samples and indoor air samples were collected at five locations from the lowest level in the office/warehouse building participating in this study. Figure 3 shows the project site building and the locations for soil gas sampling.

3.2 Pre-Sampling Survey

On March 16, 2007, AKRF initiated the soil-vapor sampling program by completing a pre-sampling survey of the site building. Mr. Marc Godick and Bryan Zieroff of AKRF were accompanied by Nathan Walz of the NYSDOH, Don Duthaler of Baker Properties (site owner representative), and Ernie Sweet of Environmental Resource Management (ERM) (consultant for the site owner). The survey was completed to document any factors that may affect indoor air quality and to determine the location and quantity of sampling locations. The survey included interviews with a representative of each building occupant. The building occupants and corresponding representative included:

- Polymedco, Inc. – Richard DeAlto
- Motion Labs, Inc. – John Coppolecchia
- International Purchasing Systems – Michael Brooks

Documentation was compiled of the building characteristics, air flow patterns, heating, venting and air conditioning, occupancy, water and sewage utilities, building operations, product inventory, and any other known factors that may affect indoor air quality. A mini Rae photoionization detector (PID) was used during the survey to sample ambient air for the presence of VOCs. Prior to conducting the survey, the PID was calibrated with 100 parts per million (ppm) isobutylene in accordance with the manufacturer's instructions. A NYSDOH Indoor Air Quality Questionnaire and Building Inventory form for each occupant was used to document the detailed results of the survey and is included in Appendix A.

| Soil Gas Well I.D. | Sampling Rationale |
|--------------------|---|
| SV-10 | Soil gas investigation at the north end of the Polymedco office area. Sub-slab point through floor in corner of copy room. Ambient air sample in at breathing level in copy room. |
| SV-11 | Soil gas investigation in the central area of the Polymedco office. Sub-slab point through floor in employee office. Ambient air sample on shelf in employee office. |
| SV-12 | Soil gas investigation in the south end of the Polymedco office area in lab coat closet. Ambient air sample on shelf in closet. |
| SV-13 | Soil gas investigation in the Motion Labs office and production area. Sub-slab point through 1 st floor machine shop. Ambient air sample in 2 nd floor office area. |
| SV-14 | Soil gas investigation in the office area of the Polymedco warehouse. Sub-slab point through floor near in northeast corner of warehouse. Ambient air location in small office area in the northeast corner of the warehouse. |
| SV-15 | Soil gas investigation in the International Purchasing Systems area. Sub-slab point through concrete floor in dry goods warehouse. Ambient air |

| | |
|--|--|
| | sample location in small office area on north side of the warehouse. |
|--|--|

The building was constructed with concrete block walls and a concrete slab floor. Sections of the building interior were improved with wood frame construction and drop ceilings. A summary of the survey for each tenant is described in this section. Photographs taken during the survey are included in Appendix B. The building layout and tenant locations are shown on Figure 3.

Polymedco, Inc.

Polymedco occupied two sections of the site building; the western section consisted of a one story office area, laboratory, and a loading dock storage area, and the eastern portion consisted of a bulk warehouse (Figure 3). There was no known chemical storage in the office area. The laboratory was observed to contain a refrigerated storage unit that stored reagents for control testing of the laboratory machines. The loading dock area contained shelved storage units that stored a variety of containerized chemicals and cleaning products. Items of note included buckets of paint, spray paint, turpentine, citrus degreaser, insect spray, varnish cleaner, wood polish, tiki-torch oil, metal polish, and spray adhesive. There were no PID detections in these areas. Storage cabinets were also present in the northern end of the warehouse. The warehouse cabinets contained spray paint and primer, paint remover, citrus degreaser, PVC primer and cement, and an assortment of disinfectants and household cleaners. A slop sink and mop storage area next to the chemical storage contained a five-gallon paint bucket, a one-gallon paint thinner can and disinfectant cleaners. A full list of all stored compounds is attached to the pre-sampling survey in Appendix A. Organic vapors were detected by the PID at a concentrations ranging from 3 to 20 ppm in the slop sink area. A fuel oil boiler was located on the eastern side of the warehouse. The boiler area was secured by a spill containment berm. Fuel oil staining and petroleum absorbent materials were observed on the concrete floor within the containment berm. Fuel oil odors were evident in this area.

Motion Labs, Inc.

Motion labs occupied the section of the site building between the Polymedco office and warehouse, and the space consisted of a ground floor machine shop and a second floor manufacturing and office area. The cutting oils for machine operation were reported as being alcohol based. Burlap bags used for product shipment were spray painted once a week in the western side of the shop. Small mobile shelf units (on wheels) and milk crates used for chemical storage were seen at multiple locations throughout the first floor. Stored items included Emerald Topaz cleaner and degreaser, Excelene polishing oil (containing petroleum distillates), a one-gallon container of concentrated degreaser (containing petroleum and phenols), white board cleaner, a one-gallon container of velocite oil No. 6, and a five-gallon container of kerosene. Organic vapors were detected by the PID at concentrations up to 58 ppm above an open container of petroleum distillates. The second floor manufacturing area contained air driven equipment for product assembly. A commercial spray lubricant was used on the equipment and isopropyl alcohol was used for cleaning the electric panels. A storage area next to the cafeteria contained floor sealer, glass cleaner, ammonia and an assortment of household cleaners. Portable storage shelves were observed containing non-chlorinated degreaser spray, spray paint, a five-gallon container of light aliphatic naphtha, and containers of locking cement for nuts/bolts. Flammable material storage cabinets were located on the second floor and contained solder remover, spray lubricants, air tool cleaners (containing petroleum distillates), a five-gallon gasoline container, a one-gallon kerosene container, scotch grip adhesive, paint cans, spray paint, denatured solvent, and contact cement. There were no detections with the PID while screening the indoor air on the second floor.

An external boiler room was enclosed in an outdoor area on the north end of the Motion Labs section of the building. The boiler room contained a fuel oil boiler and a compressor. Multiple one-gallon paint cans and a five-gallon paint bucket were stored in the boiler room. An open five-gallon bucket was observed to be full of used compressor oil.

International Purchasing Systems

International Purchasing Systems occupied the eastern portion of the site building and consisted of a dry goods warehouse and a small office area. There was no chemical usage or storage reported to be associated with business operations. An oil furnace was used to heat the office area. The warehouse was not heated. A small janitor closet contained a one-gallon container of citrus degreaser, carpet cleaner, a one-gallon container of degreaser (containing petroleum distillates) and an assortment of household cleaners. There were no PID detections in the International Purchasing Systems occupied areas.

A total of six sub-slab sample point locations (SV-10 through SV-15) and six corresponding ambient air locations were approved by the NYSDOH. The sampling locations are shown on Figure 3. The rationale for each soil gas well location is summarized as follows:

3.3 Sub-Slab Soil Gas Sampling

On March 24, 2007, Zebra Environmental, Inc. (Zebra) of Lynbrook, New York, installed the interior soil-gas sampling points (SV-11 through SV-15), with the exception of SV-10. The area selected for SV-10 consisted of a wood framed floor constructed on top of the concrete floor slab. The base bolt used to secure the coring machine was being pulled out of the wood floor during the coring process. An attempt was made to use longer base bolts to secure the coring machine into the underlying concrete slab. After several attempts Zebra indicated they were unable to properly secure the coring machine, which is required by the safety guidelines for proper usage. A dedicated soil gas sampling point was installed at the remaining locations as described in the SVIWP. Photographs showing the vapor point installation are included in Appendix B.

On March 29, 2007, AKRF returned to the site to complete the field sampling program as stated in the SVIWP. AKRF personnel were accompanied by Ernie Sweet of ERM. Prior to initiating sample collection, each sub-slab sampling point was sealed, purged, and screened for the helium tracer gas as indicated in the SVIWP. Sample collection was initiated and during the course of the 8-hour sampling period the field personnel noted that some of the flow regulators were not functioning properly. Since the sample collection was no longer following the SVIWP, the sampling program was immediately stopped and rescheduled.

On April 5, 2007, AKRF returned to the site with new, dedicated sampling equipment to complete the field sampling program. AKRF personnel were accompanied by Ernie Sweet of ERM, Paul Simms of Severn Trent Laboratories (STL), and Sally Dewes of the NYSDEC. Prior to initiating sample collection, each sub-slab sampling point was sealed, purged, and screened for the helium tracer gas as indicated in the SVIWP. Following purging, soil gas samples for VOC analysis were collected by connecting the sample tubing to a six-liter Summa canister equipped with a vacuum gauge and flow regulator set to collect a six-liter sample over an 8-hour sampling period. The sub-slab sampling points ("S.S" label for SV-11 through SV-15 indicates sub-slab sample), were sampled as indicated in the SVIWP. Photographs of the sampling process are included in Appendix B. Sampling logs are included in Appendix C

3.4 Indoor Air Sampling

Indoor air samples [labeled SV-10 (A.A) through SV-15 (A.A)] were collected concurrently with the soil gas sampling. The indoor air samples were placed at the locations agreed upon during the pre-sampling survey and sampling was conducted in accordance with SVIWP.

3.5 Laboratory Methods

The samples were analyzed for VOCs by EPA Method TO-15 with a detection limit of 1 ug/m³ for all compounds, except for trichloroethylene, which had a detection limit of 0.25 ug/m³ for indoor air samples. All sample analysis was performed in a New York State Department of Health Environmental Laboratory Approval Program (NYSDOH-ELAP) laboratory certified to perform NYSDEC Analytical Services Protocol (ASP). The laboratory produced Category B deliverables. Samples were shipped to the laboratory with appropriate chain of custody documentation.

3.6 Quality Assurance / Quality Control

In addition to the laboratory analysis of the field samples, additional analysis was included for quality control measures. These samples included one duplicate, reported as "DUP (S.S)", taken at the indoor air location SV-13 and two background ambient (outdoor) air samples, reported as "Outdoor 1 (A.A)" and "Outdoor 2 (A.A)". All three samples were analyzed for VOCs by EPA Method TO-15. Category B deliverables are included in Appendix D.

4.0 ANALYTICAL RESULTS

4.1 Field Results

Levels of helium detected at all locations were either non detect or below 1% indicating no significant short circuiting of outside air into the soil gas sample ports during purging.

4.2 Laboratory Results

Sub-Slab Samples

Sub-slab analytical results are summarized in Table 1. Concentrations of VOCs detected were compared to the action level guidance values (from Matrix 1 and Matrix 2) of the NYSDOH Soil Vapor Intrusion Guidance and EPA BASE 90th percentile value, which provides a means of comparison to background conditions. TCE detections of 1,200 ug/m³ and 66,000 ug/m³ were recorded at locations SV-11 and SV-12, respectively, above the action levels in Matrix 1. For PCE, two detections of 5.5 and 7.8 ug/m³ were both below the lowest action level of 100 ug/m³ in Matrix 2 and also below the EPA BASE 90th percentile value of 15.9 ug/m³. 1,1,1-trichloroethane (TCA) was not detected in any of the samples. Carbon tetrachloride was detected in one sample at a concentration of 0.53 ug/m³, which was similar to the outdoor air samples. At location SV-12, a value of 11,000 ug/m³ was recorded for cis-1,2-dichloroethene (DCE), a breakdown product of TCE. Toluene was detected in all samples with a maximum value of 3,300 ug/m³ at location SV-12. Cyclohexane was detected in all but one of the samples with a maximum value of 170 ug/m³ at location SV-11.

Indoor Air Samples

Indoor air analytical results and guidance values included in Table 3.1 of the NYSDOH Soil Vapor Intrusion Guidance are included in Table 2. There were no exceedences of the guidance values for either PCE (100 ug/m³) or TCE (5 ug/m³). Toluene was detected at all locations with the highest values of 31 ug/m³ and 19 ug/m³ at locations SV-13 (Motion Labs) and SV-14

(Polymedco warehouse), respectively. The only other detection greater than 10 ug/m³ in indoor air samples was for n-heptane with a value of 17 ug/m³ at location SV-13. With a subslab value of 31 ug/m³ at this location, the indoor air detection is unlikely to be as a result of vapor intrusion and more likely associated with the sources of VOCs in at Motion Labs detailed above. All detections of other compounds were at levels similar to the outdoor air samples and below the EPA BASE 90th percentile values.

5.0 CONCLUSIONS AND RECOMMENDATIONS

No indoor air values for TCE were above the air guidance value of 5ug/m³ in Table 3.1 of the NYSDOH Soil Vapor Intrusion Guidance. Although there is no evidence of exposure to workers at the site based upon the indoor air sampling results, the elevated concentrations of TCE, and to a lesser extent 1,2-DCE and toluene, were detected in the subslab soil gas beneath the Polymedco office area. The updated feasibility should evaluate subslab vapor mitigation to prevent potential future vapor intrusion.

The indoor air sample for SV-13 was taken within the Motion Labs building where a number of possible sources of toluene were present as detailed in section 3.2, and the detected concentration was below the EPA based 90th percentile. Sampling data at locations SV-14 and SV-15 demonstrate that soil vapor intrusion is not occurring and that the potential for soil vapor intrusion to occur is not likely. The detection of 19 ug/m³ at location SV-14 is three times the subslab value and unlikely to be as a result of vapor intrusion. No further action is recommended in the Polymedco, Motion Labs, and International Purchasing Systems warehouse buildings where these samples were collected.

6.0 REFERENCES

Foster Wheeler Environmental Corporation; *Remedial Investigation/Feasibility Study (RI/FS)*, Magna Metals Site, Cortlandt, New York; June 1998.

Tetra Tech FS, Inc.; *Draft Supplements Remedial Investigation Report*, Magna Metals Site, Cortlandt, New York; August 2004.

Tetra Tech EC, Inc.; *Data Findings From the Additional Data Collection Activities for the Former Magna Metals Site (NYSDEC Site No. 360003)*, Cortlandt, New York; June 2006.

New York State Department of Health, *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006.

New York State Department of Environmental Conservation, Division of Environmental Remediation, *DER-13/Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York*, October 2006.

New York State Department of Environmental Conservation, Division of Environmental Remediation, *Draft DER-10/Technical Guidance for Site Investigation and Remediation*, December 2002.

New York State Museum and Science Service Geological Survey, Map and Chart Series No. 15; *Geologic Map of New York, Lower Hudson Sheet, New York*; 1970; Reprinted 1995.

TABLES

Table 1
Magna Metals
New York, NY
Soil Vapor Analytical Results

| Client ID Date Sampled Lab Sample ID Units | NYSDOH Vapor Intrusion Guidance Values (ug/m3) | EPA BASE 90th percentile (ug/m3) | SV-13 DUP(S.S) 4/5/2007 17:06 JTPH11AD ug/m3 | SV-11(S.S) 4/5/2007 16:34 JTPC31AD ug/m3 | SV-12(S.S) 4/5/2007 16:38 JTPHF1AD ug/m3 | SV-13(S.S) 4/5/2007 17:06 JTPH51AD ug/m3 | SV-14(S.S) 4/5/2007 17:28 JTPH91AD ug/m3 | SV-15(S.S) 4/5/2007 16:56 JTPJG1AD ug/m3 |
|---|---|--|---|---|---|---|---|---|
| Compound | | | | | | | | |
| 1,1,1-Trichloroethane | | 20.6 | 4.4 U | 8.7 U | 680 U | 4.4 U | 0.87 U | 0.87 U |
| 1,1,2,2-Tetrachloroethane | | 20.6 | 5.5 U | 11 U | 860 U | 5.5 U | 1.1 U | 1.1 U |
| 1,1,2-Trichloroethane | | <1.5 | 4.4 U | 8.7 U | 860 U | 4.4 U | 0.87 U | 0.87 U |
| 1,1-Dichloroethane | | <1.5 | 3.2 U | 6.5 U | 500 U | 3.2 U | 0.65 U | 0.65 U |
| 1,1-Dichloroethene | | <1.4 | 3.2 U | 6.3 U | 490 U | 3.2 U | 0.63 U | 0.63 U |
| 1,2-Dibromoethane (EDB) | | <1.5 | 6.1 U | 12 U | 960 U | 6.1 U | 1.2 U | 1.2 U |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | | <1.5 | 5.6 U | 11 U | 870 U | 5.6 U | 1.1 U | 1.1 U |
| 1,2-Dichloroethane | | <0.9 | 3.2 U | 6.5 U | 500 U | 3.2 U | 0.65 U | 0.65 U |
| 1,2-Dichloropropane | | <1.6 | 3.7 U | 7.4 U | 580 U | 3.7 U | 0.74 U | 0.74 U |
| 1,3,5-Trimethylbenzene | | 3.7 | 3.9 U | 7.9 U | 610 U | 3.9 U | 0.79 U | 0.79 U |
| 1,3-Butadiene | | <3.0 | 3.5 U | 7.1 U | 550 U | 3.5 U | 0.71 U | 0.71 U |
| 2,2,4-Trimethylpentane | | <4.8 | 9.3 U | 19 U | 1500 U | 9.3 U | 1.9 U | 1.9 U |
| 3-Chloropropene | | 250 | 2.5 U | 5 U | 390 U | 2.5 U | 0.5 U | 0.5 U |
| 4-Ethyltoluene | | 3.6 | 7.9 U | 16 U | 1200 U | 7.9 U | 1.6 U | 1.6 U |
| Benzene | | 9.4 | 2.6 U | 5.1 U | 400 U | 2.9 U | 2.6 | 2.2 |
| Bromodichloromethane | | <6.8 | 5.4 U | 11 U | 840 U | 5.4 U | 1.1 U | 1.1 U |
| Bromoform | | <6.8 | 8.3 U | 17 U | 1300 U | 8.3 U | 1.7 U | 1.7 U |
| Bromomethane | | <1.7 | 3.1 U | 6.2 U | 480 U | 3.1 U | 0.62 U | 0.62 U |
| Carbon tetrachloride | 5/50/250 | <1.3 | 2.5 U | 5 U | 390 U | 2.5 U | 0.5 U | 0.53 |
| Chloroethane | | <1.1 | 2.1 U | 4.2 U | 330 U | 2.1 U | 0.42 U | 0.42 U |
| Chloroform | | 1.1 | 3.9 U | 7.8 U | 610 U | 3.9 U | 0.78 U | 0.78 U |
| cis-1,2-Dichloroethene | | <1.9 | 3.2 U | 6.3 U | 1100 U | 3.2 U | 0.63 U | 0.63 U |
| cis-1,3-Dichloropropene | | <2.3 | 3.6 U | 7.3 U | 570 U | 3.6 U | 0.73 U | 0.73 U |
| Cyclohexane | | <2.3 | 87 | 170 | 1100 U | 97 | 17 | 56 |
| Dibromochloromethane | | <2.3 | 6.8 U | 14 U | 1100 U | 6.8 U | 1.4 U | 1.4 U |
| Dichlorodifluoromethane | | 16.5 | 4 U | 7.9 U | 620 U | 4 U | 2.3 | 3.2 |
| Ethylbenzene | | 5.7 | 6.1 | 6.9 U | 540 U | 9.4 | 0.69 U | 0.69 U |
| Methyl tert-butyl ether | | 22.2 | 14 U | 29 U | 2200 U | 14 U | 3.3 | 4.4 |
| m-Xylene & p-Xylene | | 10 | 14 | 16 | 540 U | 22 | 0.69 U | 0.69 U |
| n-Heptane | | <3.6 | 27 | 16 U | 1300 U | 31 | 1.6 U | 1.6 U |
| n-Hexane | | 10.2 | 86 | 84 | 1400 | 88 | 18 | 26 |
| o-Xylene | | 7.9 | 6.1 | 6.9 U | 540 U | 9.6 | 0.69 U | 0.69 U |
| Tetrachloroethene | 100/1000 | 15.9 | 5.5 | 11 U | 850 U | 7.8 | 1.1 U | 1.1 U |
| Toluene | | 43 | 450 | 450 | 3300 | 600 | 6.2 | 19 |
| trans-1,2-Dichloroethene | | 43 | 3.2 U | 6.3 U | 490 U | 3.2 U | 0.63 U | 0.63 U |
| trans-1,3-Dichloropropene | | <1.3 | 3.6 U | 7.3 U | 570 U | 3.6 U | 0.73 U | 0.73 U |
| Trichloroethene | 5/50/250 | 4.2 | 3.9 | 1200 | 6600 | 4.8 | 0.46 | 0.43 U |
| Trichlorofluoromethane | | 18.1 | 4.5 U | 9 U | 700 U | 4.5 U | 1.5 | 2.3 |
| Vinyl bromide | | 3.5 | 3.5 U | 7 U | 550 U | 3.5 U | 0.7 U | 0.7 U |
| Vinyl chloride | | <1.9 | 2 U | 4.1 U | 320 U | 2 U | 0.41 U | 0.41 U |

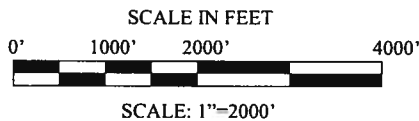
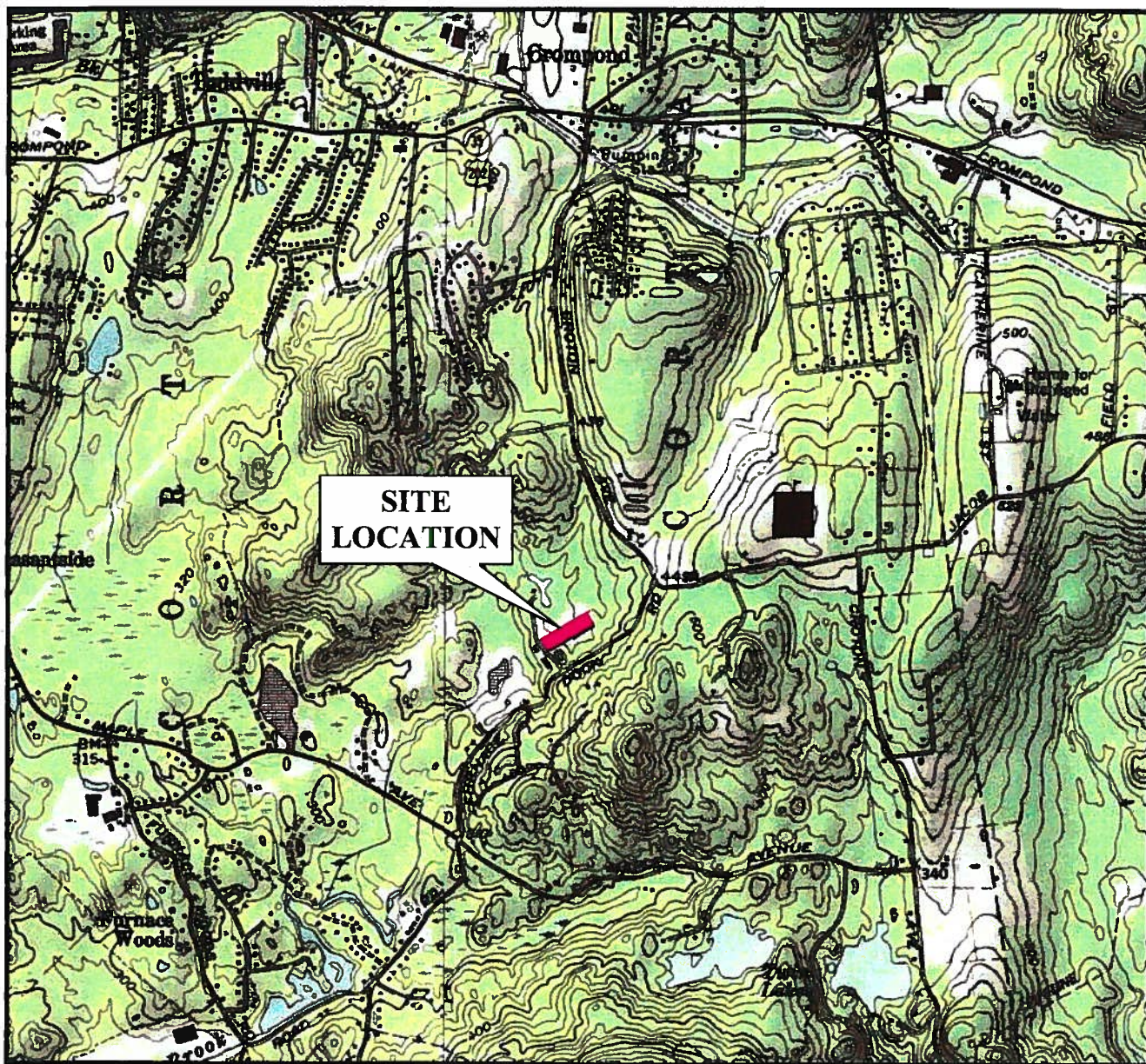
Soil vapor guidance values for monitoring and mitigation presented in Matrices 1 & 2 of New York State Department of Health
Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

Table 2
Magna Metals
New York, NY
Indoor Air Analytical Results

| Client ID Date Sampled Lab Sample ID Units | NYSDOH Indoor Air Guidance Value (ug/m3) | EPA BASE 90th percentile (ug/m3) | OUTDOOR 1 (A.A) 4/5/2007 17:40 JTPJM1AD ug/m3 | OUTDOOR 2 (A.A) 4/5/2007 18:10 JTPJR1AD ug/m3 | SV-10(A.A) 4/5/2007 18:12 JTPHC1AD ug/m3 | SV-11(A.A) 4/5/2007 16:07 JTPHA1AD ug/m3 | SV-12(A.A) 4/5/2007 18:15 JTPHX1AD ug/m3 | SV-13(A.A) 4/5/2007 17:10 JTPH71AD ug/m3 | SV-14(A.A) 4/5/2007 17:20 JTPJE1AD ug/m3 | SV-15(A.A) 4/5/2007 16:55 JTPJH1AD ug/m3 |
|---|---|--|--|--|---|---|---|---|---|---|
| Compound | 5 | | | | | | | | | |
| 1,1,1-Trichloroethane | | 20.6 | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| 1,1,2,2-Tetrachloroethane | | 20.6 | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U |
| 1,1,2-Trichloroethane | | <1.5 | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| 1,1-Dichloroethane | | <1.4 | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,1-Dichloroethene | | <1.4 | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dibromoethane (EDB) | | <1.5 | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | | <1.5 | 0.56 U | 0.56 U | 0.56 U | 0.56 U | 0.56 U | 0.56 U | 0.56 U | 0.56 U |
| 1,2-Dichloroethane | | <0.9 | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | <1.6 | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| 1,3,5-Trimethylbenzene | | 3.7 | 0.39 U | 0.39 U | 1.2 | 1.2 | 0.78 | 1.7 | 0.7 | 0.71 |
| 1,3-Butadiene | | <3.0 | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| 2,2,4-Trimethylpentane | | <4.8 | 0.93 U | 0.93 U | 0.93 U | 0.93 U | 0.93 U | 0.93 U | 0.93 U | 0.93 U |
| 3-Chloropropene | | 250 | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| 4-Ethyltoluene | | 3.6 | 0.79 U | 0.79 U | 0.79 U | 0.79 U | 0.79 U | 0.79 U | 0.79 U | 0.79 U |
| Benzene | | 9.4 | 0.48 | 0.91 | 0.57 | 0.55 | 0.71 | 1.1 | 1.5 | 0.77 |
| Bromodichloromethane | | <6.8 | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U |
| Bromoform | | <6.8 | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromomethane | | <1.7 | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U |
| Carbon tetrachloride | 100 | <1.3 | 0.51 | 0.66 | 0.56 | 0.53 | 0.51 | 0.47 | 0.77 | 0.54 |
| Chloroethane | | <1.1 | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U |
| Chloroform | | 1.1 | 0.39 U | 0.39 U | 0.39 U | 0.39 U | 0.39 U | 1.2 | 0.95 | 1.2 |
| cis-1,2-Dichloroethene | | <1.9 | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| cis-1,3-Dichloropropene | | <2.3 | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| Cyclohexane | | <2.3 | 0.69 U | 0.69 U | 0.69 U | 0.69 U | 0.69 U | 3.3 | 1.1 | 0.97 |
| Dibromochloromethane | | <2.3 | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U |
| Dichlorodifluoromethane | | 16.5 | 2.2 | 3.2 | 2.6 | 2.3 | 2.2 | 2.1 | 3.6 | 2.2 |
| Ethylbenzene | | 5.7 | 0.35 U | 0.35 U | 0.41 | 0.49 | 0.62 | 1.8 | 3.2 | 1.9 |
| Methyl tert-butyl ether | | 22.2 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 6 | 1.4 U | 1.4 U |
| m-Xylene & p-Xylene | | 10 | 0.42 | 0.87 | 1.3 | 1.4 | 1.9 | 5.9 | 7.6 | 4.5 |
| n-Heptane | | <3.6 | 0.82 U | 0.94 | 0.82 U | 1.7 | 0.82 U | 17 | 1.7 | 4.8 |
| n-Hexane | | 10.2 | 0.7 U | 0.76 | 0.7 U | 0.7 U | 0.7 U | 0.89 | 1 | 0.7 U |
| o-Xylene | | 7.9 | 0.35 U | 0.35 U | 0.48 | 0.6 | 0.59 | 2 | 2.8 | 1.8 |
| Tetrachloroethene | 100 | 15.9 | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 1.3 | 0.61 |
| Toluene | | 43 | 0.97 | 2.2 | 3.8 | 3.6 | 4 | 31 | 19 | 12 |
| trans-1,2-Dichloroethene | | 43 | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| trans-1,3-Dichloropropene | | <1.3 | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| Trichloroethene | 5 | 18.1 | 0.21 U | 0.21 U | 2.1 | 2.2 | 2.9 | 1.4 | 0.21 U | 0.21 U |
| Trichlorofluoromethane | | 18.1 | 1.3 | 1.8 | 1.4 | 1.3 | 1.7 | 1.3 | 2.2 | 1.4 |
| Vinyl bromide | | 3.5 | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| Vinyl chloride | | <1.9 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |

Indoor air guidance values presented in Table 3.1 and Matrices 1 & 2 of New York State Department of Health
Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

FIGURES



SOURCE:
7.5 MINUTE SERIES USGS TOPOGRAPHIC MAP
QUADRANGLE: MOHEGAN LAKE, NY 1981

**MAGNA METALS
CORTLANDT, NEW YORK**

PROJECT SITE LOCATION

AKRF

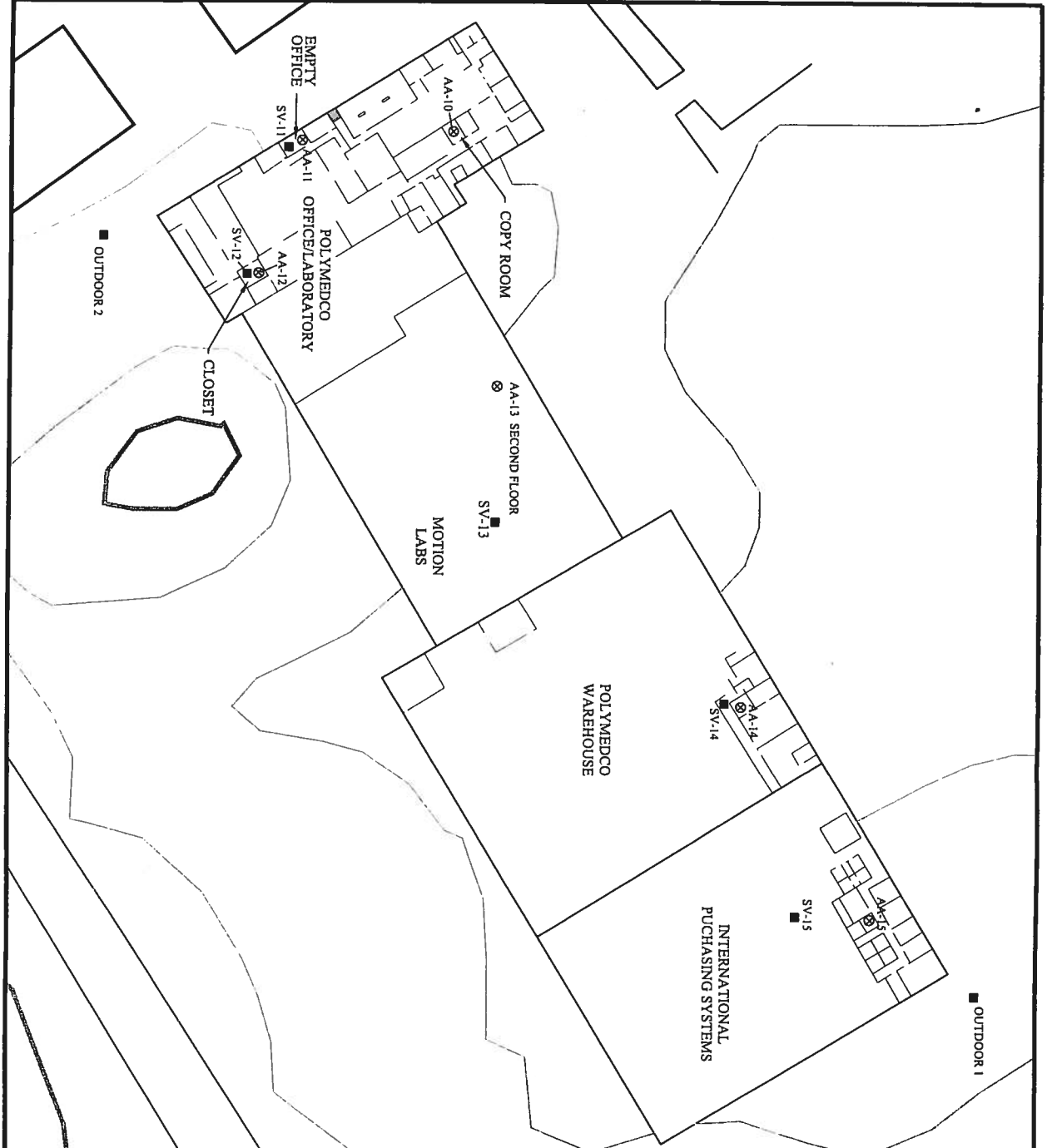
Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE
1.08.06

PROJECT No.
40256

SCALE
AS SHOWN

FIGURE
1



SOURCES:
1. BASE MAP PROVIDED BY TETRA TECH EC, INC. JUNE 2006.

2. CONTOUR LINES BASED ON MOHEGAN LAKE, NY AND PEESKILL, NY TOPOGRAPHIC QUADRANGLES, 7.5-MINUTE SERIES, DATED 1956 AND 1957, RESPECTIVELY, AND PHOTOREVISED IN 1981.

3. ADDITIONAL SURFACE FEATURES BASED ON WESTCHESTER COUNTY DEPARTMENT OF PLANNING AERIAL PHOTOGRAPH (SPRING 1990), DECEMBER 18, 1999 AERIAL PHOTOGRAPH, AND SURVEY DATA.

LEGEND:

- SV-14 SUBSLAB VAPOR SAMPLING LOCATION
- ⊗ AA-14 INDOOR AIR SAMPLING LOCATIONS
- 320 CONTOUR LINE (20 FT INTERVAL)

NOTES:
1. LOCATIONS OF FORMER MAGNA METALS BUILDING, 1 STORY CONCRETE BLOCK BUILDING, SHED, GEOPHYSICAL SURVEY AREA, AND MONITORING WELLS ARE BASED ON SURVEY DATA.



AKRF
Environmental Consultants
34 South Broadway, White Plains, N.Y. 10601

MAGMA METALS
CORTLANDT, NEW YORK
SAMPLING LOCATIONS

DATE
07.20.07

PROJECT NO
40256

SCALE
1"=60'

FIGURE
3

APPENDIX A
NYSDOH INDOOR AIR QUALITY QUESTIONNAIRE
AND BUILDING INVENTORY FORM

Poly Medco.

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Bryan Zieroff Date/Time Prepared 12/16/07

Preparer's Affiliation AKRF Phone No. _____

Purpose of Investigation To determine SVS point locations and factors that could affect indoor air.

1. OCCUPANT:

Interviewed: Y/N

Last Name: De Alto First Name: Richard

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants 19-65

2. OWNER OR LANDLORD: (Check if same as occupant ____)

Interviewed: ☒ Y / ☐ N

Last Name: Dunahy First Name: Donald

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential
Industrial

School
Church

Commercial/Multi-use
Other: _____

Poly Medco
Medical supplies
School - 10/9/

- Poly Medco

If the property is residential, type? (Circle appropriate response)

| | | |
|--------------|-----------------|-------------------|
| Ranch | 2-Family | 3-Family |
| Raised Ranch | Split Level | Colonial |
| Cape Cod | Contemporary | Mobile Home |
| Duplex | Apartment House | Townhouses/Condos |
| Modular | Log Home | Other: _____ |

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Medical Supply - Laboratory Testing

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1

Building age Built late 50's

Is the building insulated? Y / N

Unknown

How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

- ONE floor

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete Block wall / Slab Floor stone brick
- b. Basement type: full crawlspace slab other _____
- c. Basement floor: concrete dirt stone other _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with (Paint coating)
- f. Foundation walls: poured block stone other Wood frame interior
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: _____ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Cracks in floor

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply - note primary)

Hot air circulation
Space Heaters
Electric baseboard

Heat pump
Stream radiation
Wood stove

Hot water baseboard
Radiant floor
Outdoor wood boiler

Boiler in garage
LP supply for radiators
Other _____

The primary type of fuel used is:

Natural Gas
Electric
Wood

Fuel Oil
Propane
Coal

Kerosene
Solar

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other _____

Air conditioning: Central Air Window units Open Windows None

multiple roof top units

Are there air distribution ducts present? Y/N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Return part of overhead hot air / AC system.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement

1st Floor

2nd Floor

3rd Floor

4th Floor

Lab testing / office / warehouse

Lab: no patient testing
no storage in
boiler.

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage loading dock - storage

b. Does the garage have a separate heating unit?

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)

d. Has the building ever had a fire?

e. Is a kerosene or unvented gas space heater present?

f. Is there a workshop or hobby/craft area?

g. Is there smoking in the building?

h. Have cleaning products been used recently?

i. Have cosmetic products been used recently?

Y/N

Y/N/NA

Y/N/NA

Please specify

Y/N When?

Y/N Where?

Y/N

Where & Type?

Y/N

How frequently?

Y/N

When & Type?

Y/N

When & Type?

External steam boiler

Maintenance area / janitorial - from office

- j. Has painting/staining been done in the last 6 months? ☒ Y ☐ N Where & When? _____
- k. Is there new carpet, drapes or other textiles? ☒ Y ☐ N Where & When? _____
- l. Have air fresheners been used recently? ☒ Y ☐ N When & Type? Bathroom - frequent
- m. Is there a kitchen exhaust fan? ☒ Y ☐ N If yes, where vented? _____
- n. Is there a bathroom exhaust fan? ☒ Y ☐ N If yes, where vented? _____
- o. Is there a clothes dryer? ☒ Y ☐ N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? ☒ Y ☐ N When & Type? 1 month ago - outdoor
- Are there odors in the building? ☐ Y ☐ N
If yes, please describe: _____

Do any of the building occupants use solvents at work? ☒ Y ☐ N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? ☐ Y ☐ N

Lab coats laundered - Not dry cleaned

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

- Some employees
- Yes, use dry-cleaning regularly (weekly) ☐ No ☐
- Yes, use dry-cleaning infrequently (monthly or less) ☐ Unknown ☐
- Yes, work at a dry-cleaning service ☐

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well ☐ Other: _____

Sewage Disposal: ☒ Public Sewer ☒ Septic Tank ☒ Leach Field ☒ Dry Well ☐ Other: _____

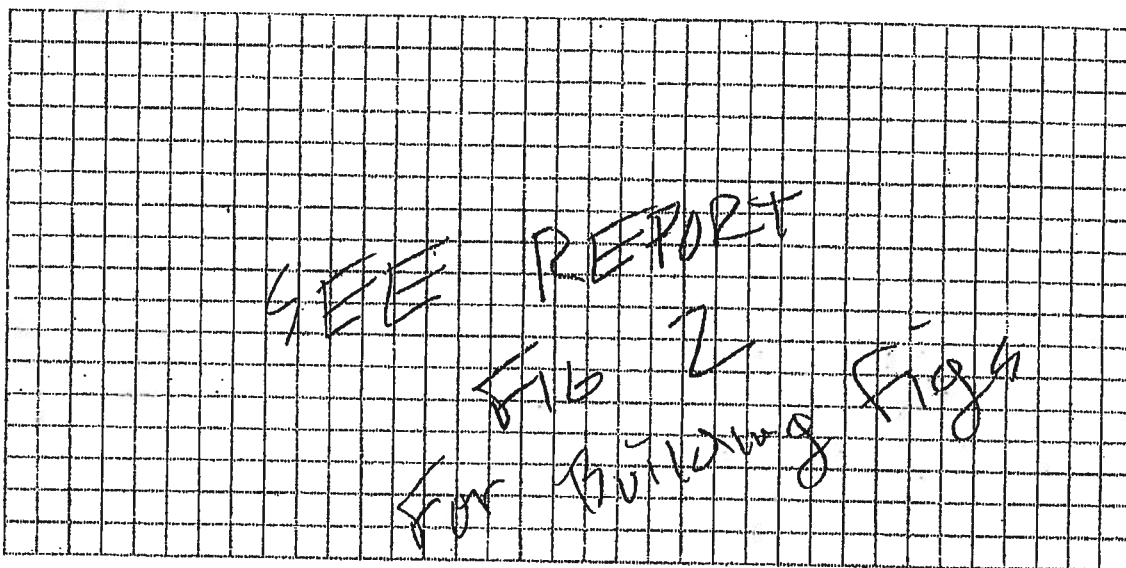
10. RELOCATION INFORMATION (for oil spill residential emergency)

- a. Provide reasons why relocation is recommended: _____
- b. Residents choose to: remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel ☐
- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

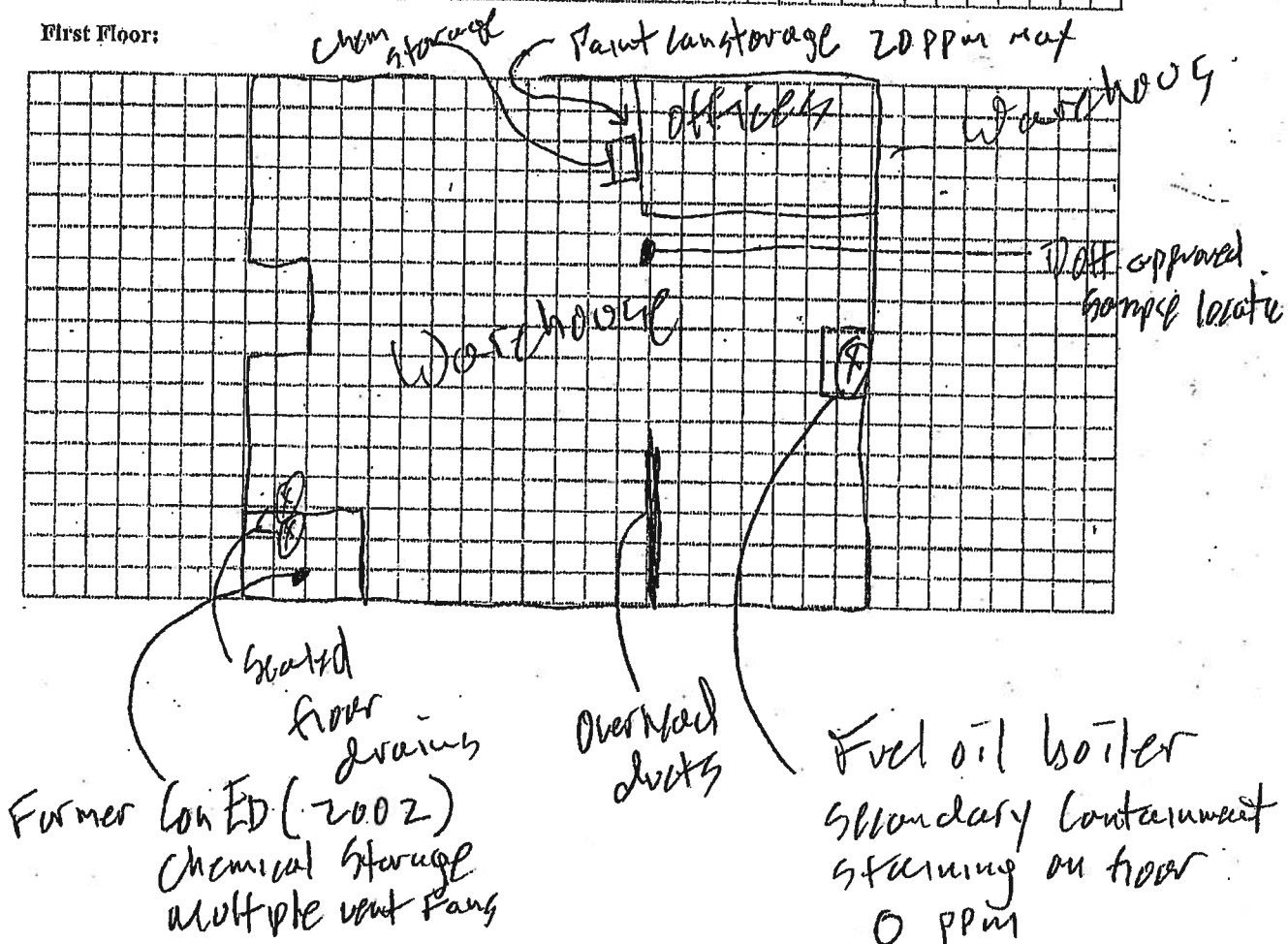
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



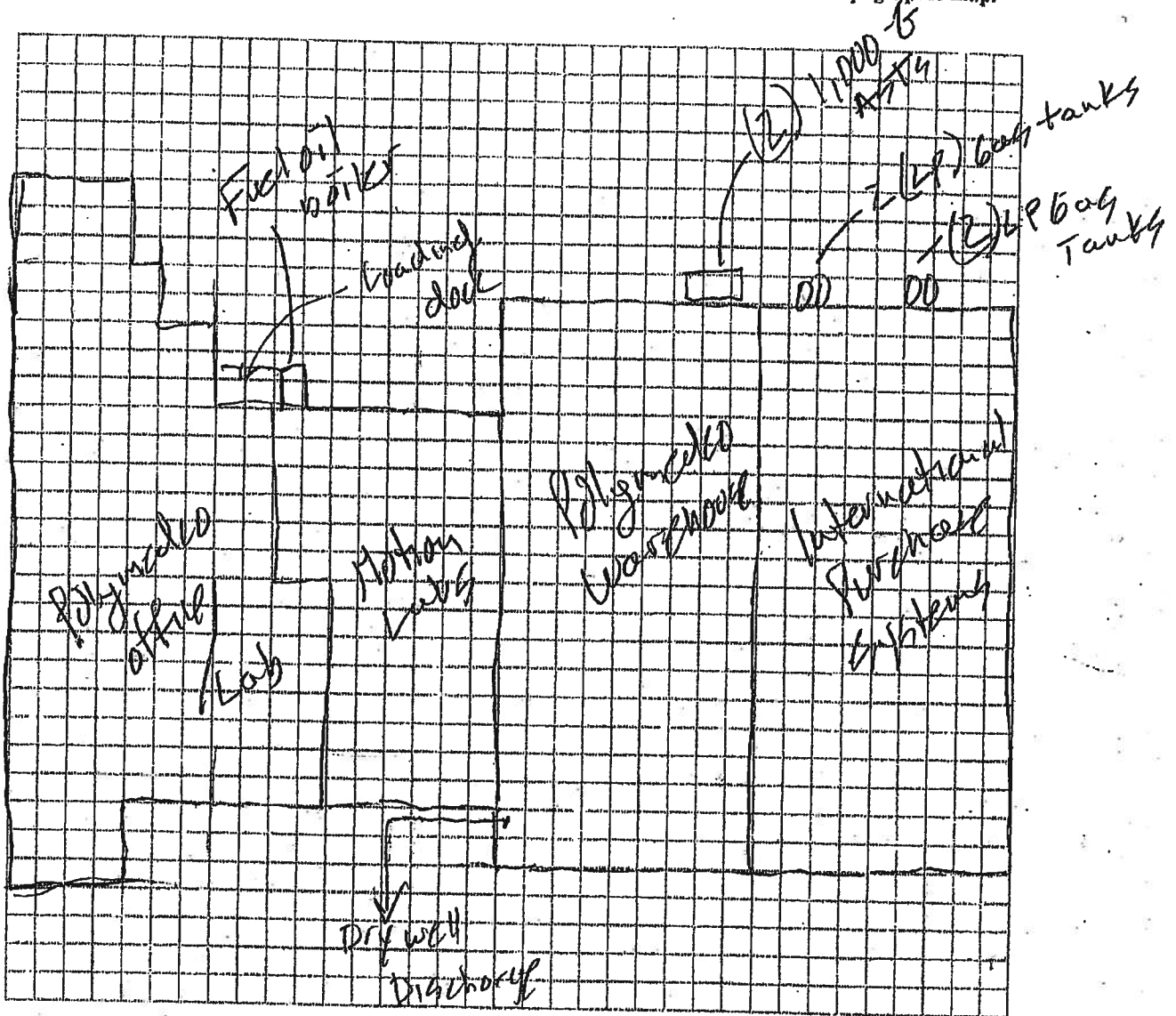
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



For Entire building

- * Polymer Lab
- * Motion Lab
- * International Purchase Systems

Make & Model of field instrument used: Mini Luz 2000 PID

List specific products found in the residence that have the potential to affect indoor air quality.

[illegible]

** Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

POLYMEDCO'S WAREHOUSE
CHEMICAL LIST

(P3)

CLOROX / CLOROX WIPES
ZEP / CITRUS CLEANER AND DEGREASER
PEAK / WINDSHIELD WASH
BLUE CORAL / CAR WASH AND WAX CLEANER
PINE SOL / DISINFECTANT CLEANER
PAINT THINNER
GREAT STUFF / FOAM SEALANT
UGL / DRYLOK ETCH MASONRY CLEANER
THERMATE / DEFOAMER
THERMATE / STEAM CARPET CLEANER
ZEP / UPHOLSTERY CLEANER
ZIP STRIP / PAINT REMOVER
OATEY / PVC PRIMER
OATEY / PVC CEMENT
KF / BOWL AND BATHROOM DISINFECTANT
HENRY / CERAMIC TILE ADHESIVE
PRE MIXED TILE GROUT
OOPS / MULTIPURPOSE REMOVER
NO 7 / POLISHING COMPOUND
RUSTOLEUM / SPRAY PAINT
RUSTOLEUM / PRIMER
PAINTER'S TOUCH / SPRAY PAINT
XYLENE
MULTI PURPOSE GREASE
REVERE / CRETE-ETCH
BEHR FLOOR PAINT
BEHR / PRIMER

POLYMEDCO'S CHEMICAL LIST (OFFICE) (P1)

CLOROX / DISINFECTING WIPES

LYSOL / DISINFECTANT SPRAY

AIR WICK WIZARD / SPRAY

PLEDGE / WOOD POLISH

WINDEX / WINDOW CLEANER

409 / GLASS AND SURFACE CLEANER

ZEP CITRUS / CLEANER AND DEGREASER

MURPHY / OIL SOAP

NOVUS / PLASTIC POLISH

SNELL / HOSPITAL DISINFECTANT SPRAY

DIRTEX / SPRAY CLEANER

GUARDSMAN / WAX REMOVER WOOD CLEANER

SHEETROCK JOIN COMPOUND

PINGT / HEAVY DUTY LIQUID DETERGENT

RUG DOCTOR / STEAM CLEANER

RUG DOCTOR / ANTI-FOAM

RUG DOCTOR / HI TRAFFIC PRE-TREATMENT

ZEP / UPHOLSTERY CLEANER

KF / DISINFECTANT BOWL AND BATHROOM CLEANER

CLR / CALCIUM, LIME, RUST REMOVER

GOOF OFF / REMOVER

WD 40 / 3 IN 1 OIL / TURTLEWAX / REMOVER
BUG AND TAR

ARMOR ALL / PROTECTANT

STP / FUEL INJECTOR CLEANER

STP / GAS TREATMENT

3M SUPER 77 / MULTIPURPOSE ADHESIVE

3M SPRAY MOUNT / ARTIST ADHESIVE

KRYLON / VARNISH SPRAY

ROBERTS / SEAM SEALER

OSS CLEANING CO. CHEMICAL LIST

SP. SPL. ELITE / GLASS AND WINDOW CLEANER

PRONTO / NON ACID DISINFECTANT BOWL AND
BATHROOM CLEANER

JAN-Q. PUBLIC / NON ACID DISINFECTANT BOWL AND
BATHROOM CLEANER

SOLUTION SERIES SUNSHINE / NEUTRAL ALL PURPOSE
CLEANER

PROSAIL UNITEEM / UNIVERSAL CLEANER

PROSAIL STERLING / STAINLESS STEEL AND METAL POLISH

WINDEX / WINDOW CLEANER

LEMON PLUS / NEUTRAL ALL PURPOSE FLOOR AND WALL
CLEANER

SOLUTION SERIES / PINK LOTION HAND SOAP

PROSAIL / RICH WOOD POLISH

SPECTROWAX / FURNITURE CLEANER AND POLISH

OLD DUTCH / CLEANER

PROSAIL / CLINI CLEAN FOAMING DISINFECTANT

SOLUTION SERIES / WINDOW AND GLASS CLEANER

GREAT VALUE / ALL PURPOSE CLEANER

PEAK / WINDSHIELD WASH

EZ / TURPENTINE

REAL KILL / WASP AND HORNET KILLER

SHOO FLY / HORNET KILLER

RAID / ANT AND ROACH KILLER

STRAIT LINE / MARKING CHALK

OATEY PLUMBER'S PUTTY

PAINT

RUST-OLEUM / TRAFFIC STRIPING PAINT

BEHR PAINT LATEX / KILZ 2 / STAINBLOCKER

BENJAMIN MOORE LATEX

PAINTER'S TOUCH LATEX

RUST-OLEUM LATEX

RUST-OLEUM SPRAY PAINT

KRYLON SPRAY PAINT

REVERE / EPOXI COAT FLOOR PAINT WATER BASE

DAP / CAULK

PHENOSEAL VINYL ADHESIVE CAULK

STA-BIL / CONCENTRATED FUEL STABILIZER

BERNZOMATIC / PROPANE

EXPO / WHITE BOARD CLEANER

TILK / TORCH FUEL

EZ / BOILED LINSEED OIL

COROX. / COROX CLEAN UP / COROX TOILET BOWL CLEANER

SOFT SCRUB / BLEACH CLEANSER

PALMOLIVE / DISHWASHING LIQUID

HOME SELECT / DISHWASHING LIQUID

PALMOLIVE / DISHWASHER DETERGENT

CASCADE / DISHWASHER DETERGENT

ZEP / STAINLESS STEEL CLEANER

ELECTRASOL / DISHWASHER TET DRY POLYMER 11

WAREHOUSE

(P4)

ZEIP / ORANGE HAND CLEANER

GREAT VALUE / BLEACH

DAWN / DISHWASHING LIQUID

GUARDSMAN / WOOD POLISH

Motion LABS

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing:

Preparer's Name Bryan Zevoff Date/Time Prepared _____

Preparer's Affiliation MAEF Phone No. _____

Purpose of Investigation To determine gvh point locations and factors that could influence indoor air.

1. OCCUPANT:

Interviewed: ☒ Y Motion LABS

Pete Heaman
TS059

Last Name: Coppollecchia First Name: John

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 40 Age of Occupants 18-65
900-4-30 shift

2. OWNER OR LANDLORD: (Check if same as occupant ☐)

Interviewed: ☒ Y ☐ N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential
Industrial

School
Church

Commercial/Multi-use
Other: _____

If the property is residential, type? (Circle appropriate response)

| | | |
|--------------|-----------------|-------------------|
| Ranch | 2-Family | 3-Family |
| Raised Ranch | Split Level | Colonial |
| Cape Cod | Contemporary | Mobile Home |
| Duplex | Apartment House | Townhouses/Condos |
| Modular | Log Home | Other: _____ |

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Motion LABs

Does it include residences (i.e., multi-use)? Y / N

If yes, how many? _____

Other characteristics:

Number of floors 2

Building age 50 yrs

Is the building insulated? Y / N

How air tight? Tight / Average / Not Tight

*Manufacture small power
equipment for entertainment
business - sound/power
cords
lighting*

4. ~~AIRFLOW~~

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: full crawlspace slab other _____
- c. Basement floor: concrete dirt stone other _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with _____
- f. Foundation walls: poured block stone other _____
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: _____ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

cracks in concrete slab of First Floor

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation
Space Heaters
Electric baseboard
- Heat pump
Stream radiation
Wood stove
- Hot water baseboard
Radiant floor
Outdoor wood boiler
- Other _____

The primary type of fuel used is:

- Natural Gas
Electric
Wood
- Fuel Oil
Propane
Coal
- Kerosene
Solar

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other _____

Air conditioning: Central Air Window units Open Windows None

2 air returns

4 units - 2 roof - 2 interior
- none down stairs

Are there air distribution ducts present? Y/N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

2 return to roof air's
overhead ducts for heating
2 exhaust fans in bathroom - ceiling exhaust fans on 1st & 2nd floor
Boiler access outside - some room / share w/ polyurethane

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement

1st Floor

2nd Floor

3rd Floor

4th Floor

Machine Shop - shipping / receiving
manufacturing inventory

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?

Y/N Y

b. Does the garage have a separate heating unit?

Y/N/NA NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)

Y/N/NA

Please specify _____

d. Has the building ever had a fire?

Y/N When? _____

e. Is a kerosene or unvented gas space heater present?

Y/N Where? _____

f. Is there a workshop or hobby/craft area?

Y/N Where & Type? _____

g. Is there smoking in the building?

Y/N How frequently? Limited 2nd floor

h. Have cleaning products been used recently?

Y/N When & Type? _____

i. Have cosmetic products been used recently?

Y/N When & Type? _____

- j. Has painting/staining been done in the last 6 months? ☒ Y ☐ N Where & When? spray paint burlap
- k. Is there new carpet, drapes or other textiles? Y / N Where & When? hangs over/wh. for
- l. Have air fresheners been used recently? ☒ Y ☐ N When & Type? spraying cables
- m. Is there a kitchen exhaust fan? ☒ Y ☐ N If yes, where vented? overhead on 2nd floor
- n. Is there a bathroom exhaust fan? ☒ Y ☐ N If yes, where vented? _____
- o. Is there a clothes dryer? Y ☒ N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? ☒ Y ☐ N When & Type? esteron / 1 month ago
- Are there odors in the building? Y / N none in building
- If yes, please describe: _____

- Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)
- If yes, what types of solvents are used? machines - car / oil - cutting oil
- If yes, are their clothes washed at work? Y / N alcohol cleaners
- Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response) water tumbler
- Yes, use dry-cleaning regularly (weekly) soldering
- Yes, use dry-cleaning infrequently (monthly or less) parts sent out to be dipped / cleaned / anodized.
- Yes, work at a dry-cleaning service spraying wire for cable assembly
- No
- Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____

Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well Other: _____

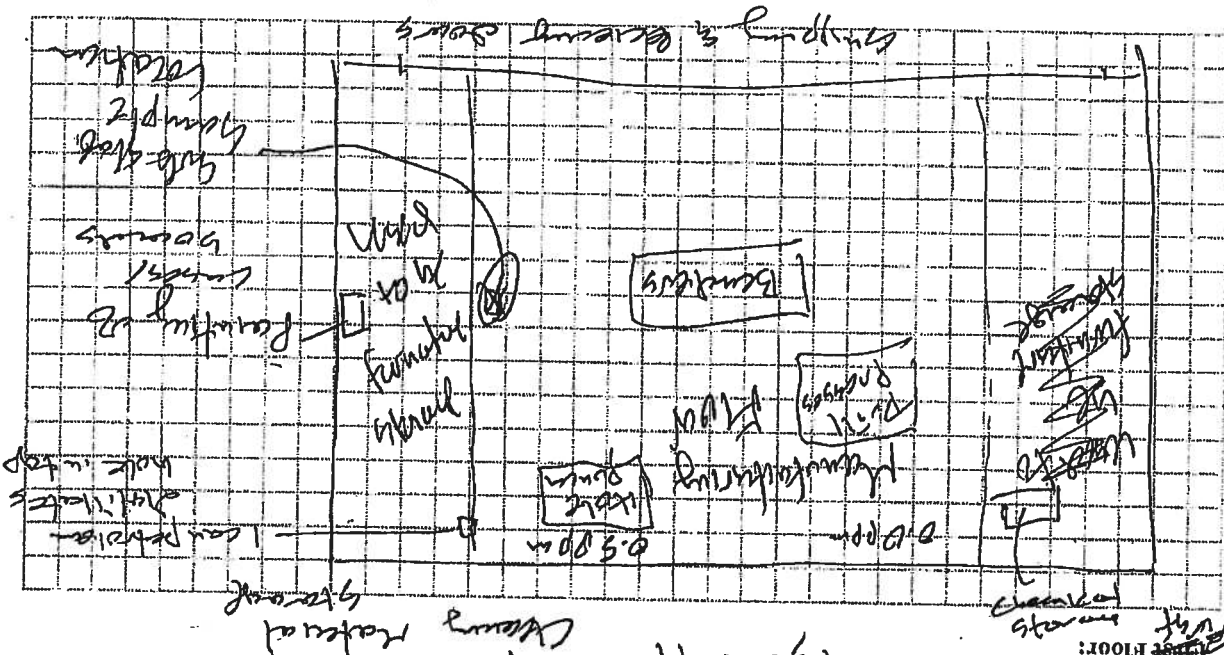
Sewage Disposal: ☒ Public Sewer ☒ Septic Tank ☒ Leach Field ☐ Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

- a. Provide reasons why relocation is recommended: _____
- b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Agreement: *Wendy*
Wendy
From existing treatment for solder

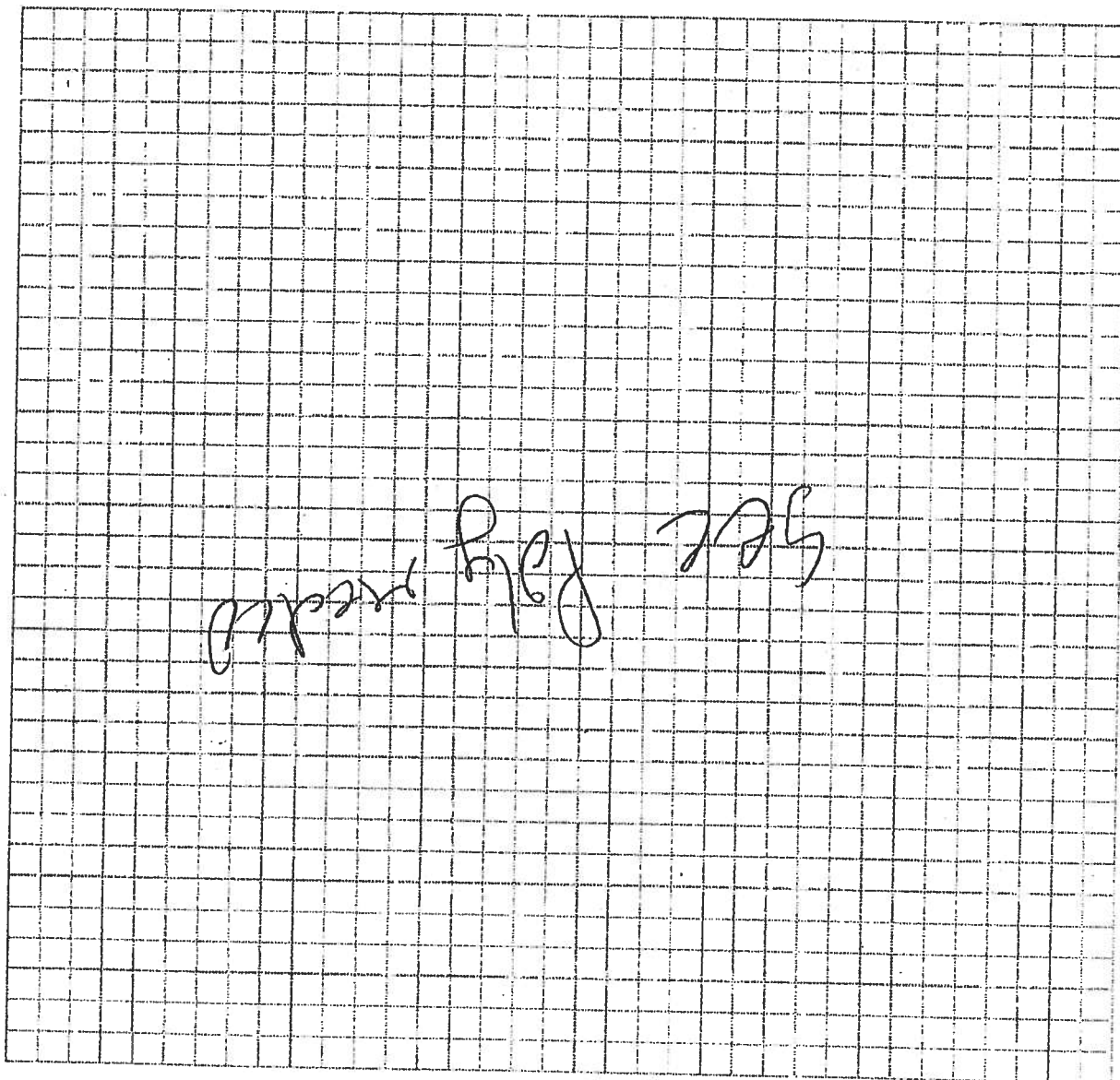


Washburn

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Minutaur 2000 PID

List specific products found in the residence that have the potential to affect indoor air quality.

| Location | Product Description | Size (units) | Condition* | Chemical Ingredients | Field Instrument Reading (units) | Photo** |
|----------|-----------------------------|--------------|------------|----------------------|----------------------------------|---------|
| 2nd fl | 2nd floor water | 4 gal | U | | 0 | |
| | Glenn cleaner | 4 gal | U | | | |
| | ETK ammonia | 3 gal | U | | | |
| | Bleach | 6 gal | U | | | |
| | Kind soap | 8 gal | U | | 0 | |
| | Ajax | U | U | | | |
| | Light bulb | U | U | | | |
| | Soft scrub | U | U | | | |
| | Mr. Clean | U | U | | | |
| 2nd fl | gray lube | U | U | Regum Vision w/ PTFE | 0 | |
| | unwaxed alcohol | U | U | | | |
| | holding box | 1 g | U | | | |
| | dryer spray | U | U | | | |
| | gray paint | U | U | | 0 | |
| | light phosphate buffer - 5g | 5g | U | | | |
| | gray can - polishing | U | U | Acetone disinfectant | 0 | |
| | gray can - 40 | can | U | Acetone disinfectant | | |
| | Acetone cleaner | 5g | U | Acetone disinfectant | 0 | |

* Describe the condition of the product containers as Unopened (U), Used (U), or Deteriorated (D)
 ** Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Flammable cabinet

kept in

6/8

Last specific products found in the residence that have the potential to affect indoor air quality.

Manke & Model of field instrument used;

| Location | Product Description | Size (units) | Condition | Chemical Ingredients | Field Instrument Reading (units) | Photo "X/N" |
|----------|---------------------|--------------|-----------|----------------------|----------------------------------|-------------|
| 1st Fl | Emerald Tapaz 1g | 1g | u | Peg Paste | | |
| | Exfoliant 8oz | 8oz | u | 1/2" dust plates | | |
| | Comcast Computer 5g | 5g | u | Cutting Oil | | |
| | Spray adhesive | u | u | Foam Fast 74 | | |
| | 4 cans Paving | 1g | u | Cutting Oil | | |
| | Relbon Tread | u | u | | | |
| | Chemical Degreasing | 1g | D | Pyralium Dish plates | | 70 |

* Describe the condition of the product containers as Unopened (UO), Used (U), or Reworked (R). ** Photographs of the front and back of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

OSR-3

International Purchasing Systems

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Bryan Zieroff Date/Time Prepared 12/16/07
Preparer's Affiliation AKRF Phone No. _____
Purpose of Investigation To determine gas point locations and factors that could affect indoor air
1. OCCUPANT: INTERVENTIONAL PURCHASING SYSTEMS
Interviewed: ☒ Y / ☐ N Last Name: Brooks First Name: Michael

Address: _____
County: _____
Home Phone: _____
Office Phone: _____
Number of Occupants/persons at this location 10
Age of Occupants 19-55
2. OWNER OR LANDLORD: (Check if same as occupant) _____
Interviewed: ☒ Y / ☐ N Last Name: Butcher First Name: Donald
Address: _____
County: _____
Home Phone: _____
Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)
Residential _____
Industrial _____
School _____
Church _____
Other: Commercial/Multi-use

If the property is residential, type? (Circle appropriate response)

- ~~Ranch~~
- ~~Residential Ranch~~
- ~~Cape Cod~~
- ~~Duplex~~
- ~~Modular~~
- 2-Family
- Split Level
- Contemporary
- Apartment House
- Log Home
- 3-Family
- Colonial
- Mobile Home
- Townhouses/Condos
- Other:

If multiple units, how many? _____

If the property is commercial, type? _____

Business Type(s) dry goods warehouse shipping/receiving

Does it include residences (i.e., multi-use)? (N) Y / N

If yes, how many? _____

Other characteristics: _____

Number of floors 1

Is the building insulated? Y / N

How air tight? Tight / Average / Not Tight

Building age 50 yrs

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

| | | | | |
|------------------------------|------------------------|-------------|--------------------|-------------|
| a. Above grade construction: | wood frame | concrete | stone | brick |
| b. Basement type: | full | crawl space | slab | other _____ |
| c. Basement floor: | concrete | dirt | stone | other _____ |
| d. Basement floor: | uncovered | covered | covered with _____ | |
| e. Concrete floor: | unsealed | sealed | sealed with _____ | |
| f. Foundation walls: | poured | block | stone | other _____ |
| g. Foundation walls: | unsealed | sealed | sealed with _____ | |
| h. The basement is: | wet | damp | dry | moldy |
| i. The basement is: | finished | unfinished | partially finished | |
| j. Sump present? | Y / N | | | |
| k. Water in sump? | Y / N / not applicable | | | |

Basement/Lowest level depth below grade: _____ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Cracks in concrete slab

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply - note primary)

The primary type of fuel used is:

Natural Gas
Electric
Wood
Fuel Oil
Propane
Coal
Kerosene
Solar

Domestic hot water tank fueled by:

Boiler/furnace located in: Basement Outdoors Main Floor Other _____
Air conditioning: Central Air Window units Open Windows None

g wall preparat system for office

NO Heat in March 2005

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

No heat in workshop

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

| | |
|-----------------------|--------------------------|
| Basement | |
| 1 st Floor | Small office - Dry Goods |
| 2 nd Floor | |
| 3 rd Floor | |
| 4 th Floor | |

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?

Y / N

b. Does the garage have a separate heating unit?

Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)?

Y / N / NA

Please specify

When?

Where?

Where & Type?

Y / N

How frequently?

Y / N

When & Type?

Y / N

When & Type?

Y / N

i. Have cosmetic products been used recently?

h. Have cleaning products been used recently?

g. Is there smoking in the building?

f. Is there a workshop or hobby/craft area?

e. Is a kerosene or unvented gas space heater present?

d. Has the building ever had a fire?

Several workshop cleaning

- j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____
- k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____
- l. Have air fresheners been used recently? Y / N When & Type? _____
- m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____
- o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N _____
- p. Has there been a pesticide application? Y / N When & Type? _____
- Are there odors in the building? Y / N If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
 Yes, use dry-cleaning infrequently (monthly or less) Unknown
 Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of installation: _____
 Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Dug Well Other: _____
 Sewage Disposal: Septic Tank Leach Field Dry Well Other: _____

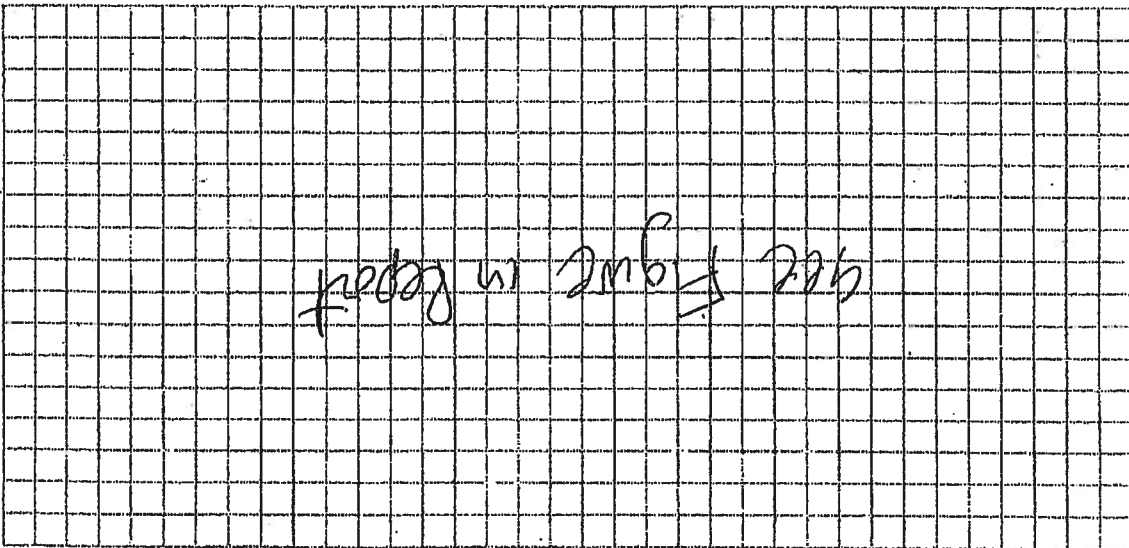
10. RELOCATION INFORMATION (for oil spill residential emergency)

- a. Provide reasons why relocation is recommended: _____
- b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

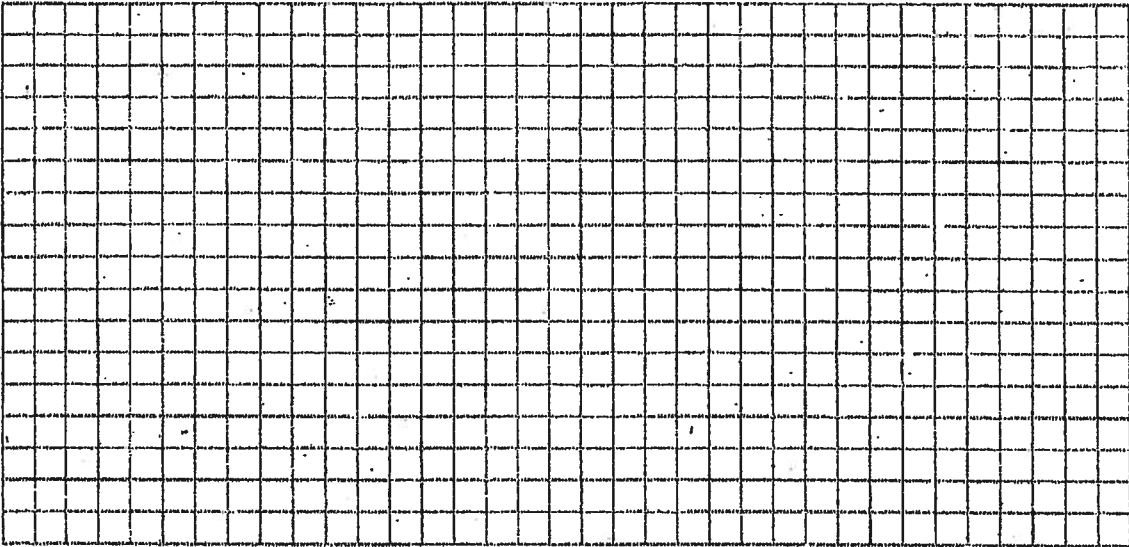
II. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

~~Basement:~~



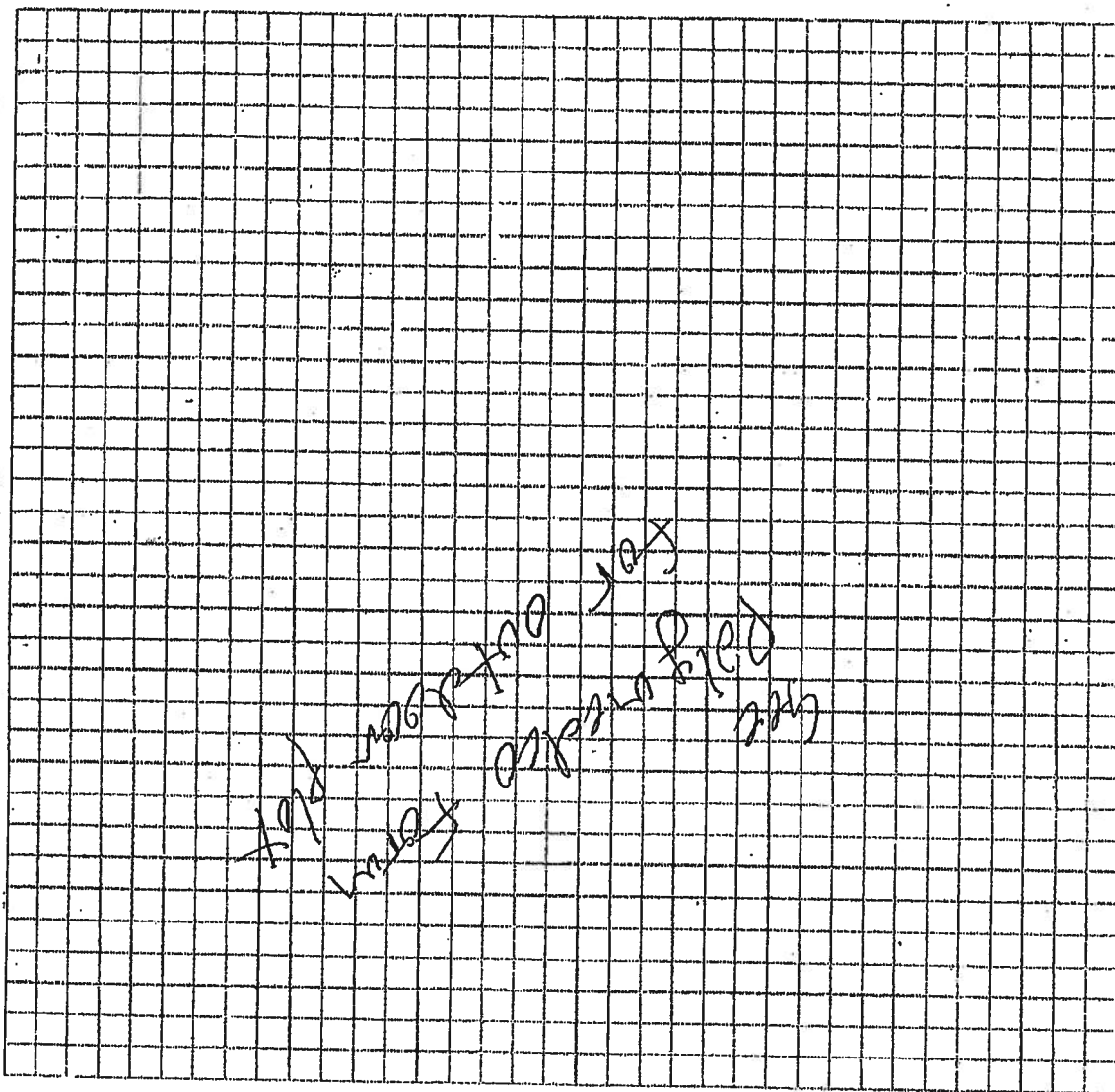
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:

May Lat 2000 P15

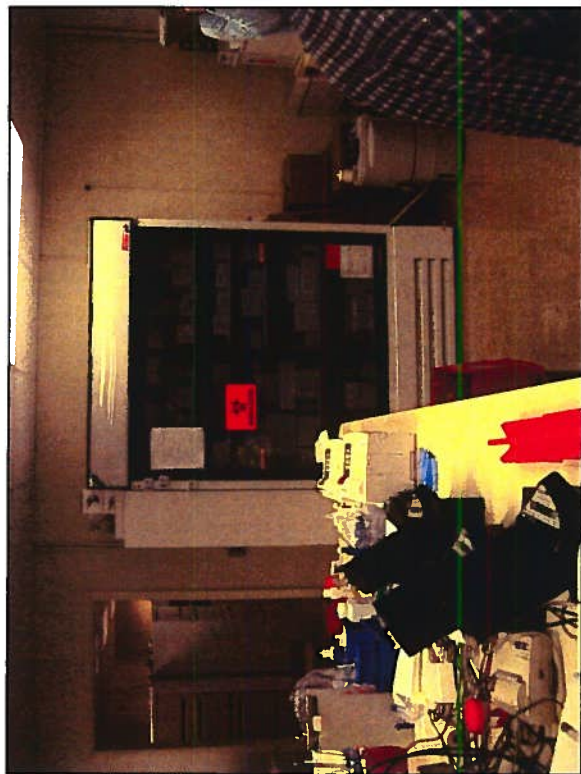
†List specific products found in the residence that have the potential to affect indoor air quality.

| Location | Product Description | Size (units) | Condition | Chemical Ingredients | Field Instrument Reading (units) | Photo X/N |
|----------|---------------------|--------------|-----------|-----------------------|----------------------------------|-----------|
| 1st Fl | Windex | 1 btl | u | | 0 | |
| | Carin deodorant | 1 g | u | Deo Chlorinated | 0 | |
| | Deo deodorant | 1 g | u | grooming disinfectant | 0 | |
| | Zip Coat deodorant | 1 g | u | | 0 | |
| | Pine Sol | 1 g | u | | 0 | |
| | bleach | 1 can | u | | 0 | |
| | light | 1 can | u | | 0 | |

Tanisha Chiswick

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Detonatoriated (D)**
 ** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX B
PHOTOGRAPHIC LOG



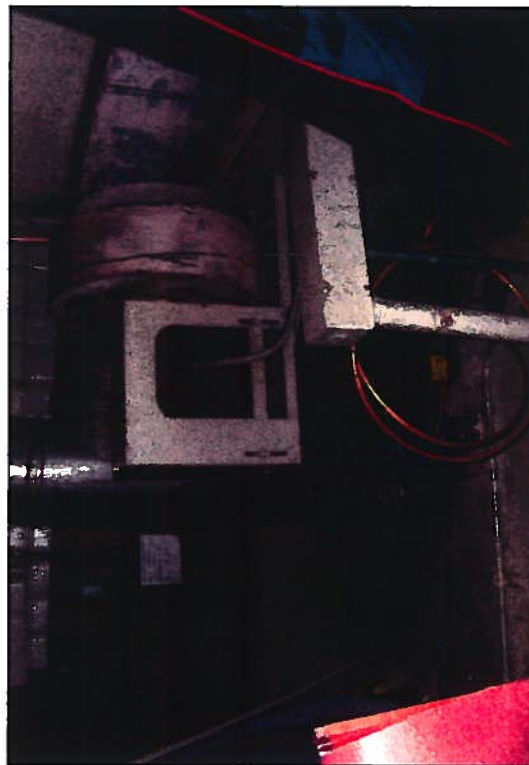
Photograph 1: Chemical storage in Polymedco laboratory.



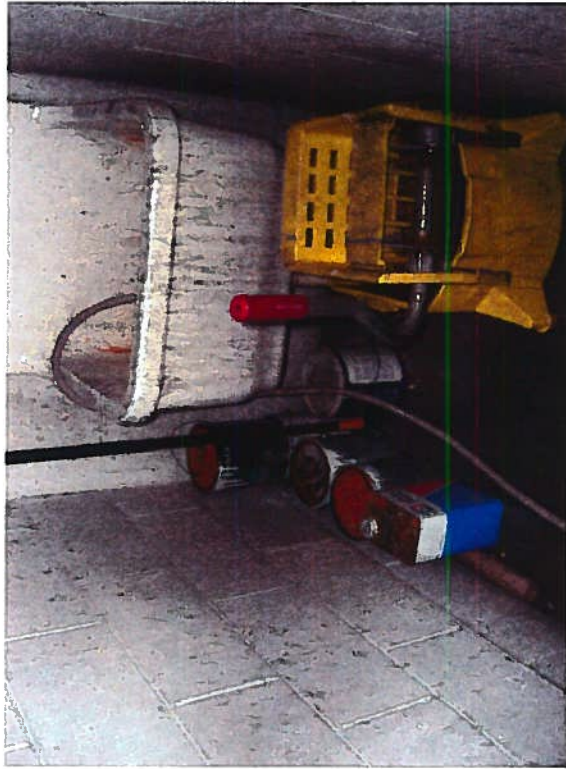
Photograph 2: Chemical and paint storage in Polymedco loading dock room.



Photograph 3: Chemical and household cleaner storage in Polymedco loading dock room.



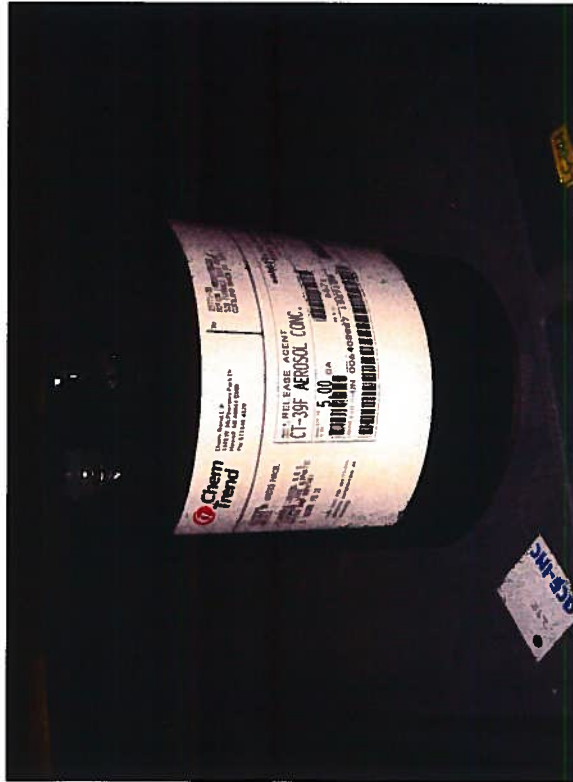
Photograph 4: Fuel oil burner with floor staining in Polymedco warehouse building.



Photograph 5: Paint and chemical storage near slop sink in Polymedco warehouse building.



Photograph 6: Chemical storage shelf in Polymedco warehouse building.



Photograph 7: Naptha container in Motion Labs production area.



Photograph 8: Flammable chemical storage in Motion Labs production area.



Photograph 9: Flammable chemical storage in Motion Labs production area.



Photograph 10: Chemical storage in Motion Labs production area.



Photograph 11: Chemicals and degreasers in Motion Labs machine shop.



Photograph 12: Kerosene storage in Motion Labs machine shop.



Photograph 13: Paint storage in fuel oil boiler room attached to Motion Labs.



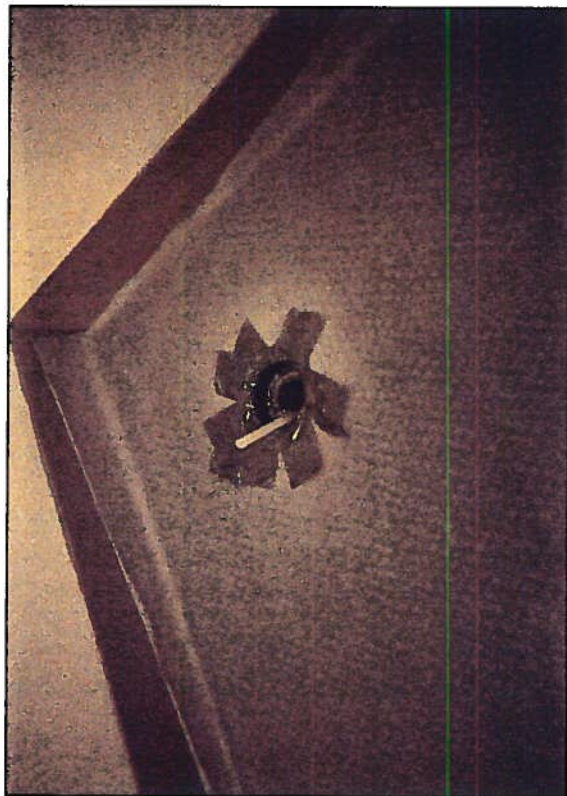
Photograph 14: Janitor closet in International Purchasing Systems warehouse.



Photograph 15: Coring of concrete at sample point SV-15.



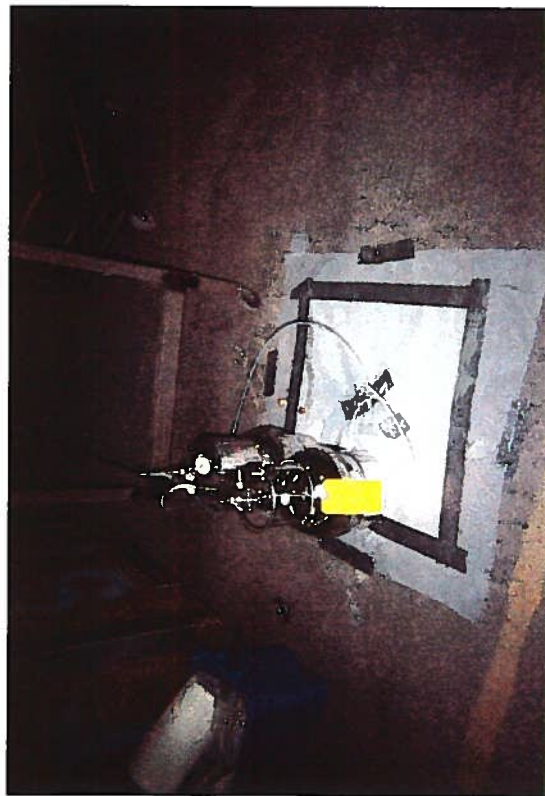
Photograph 16: Installation of vapor point.



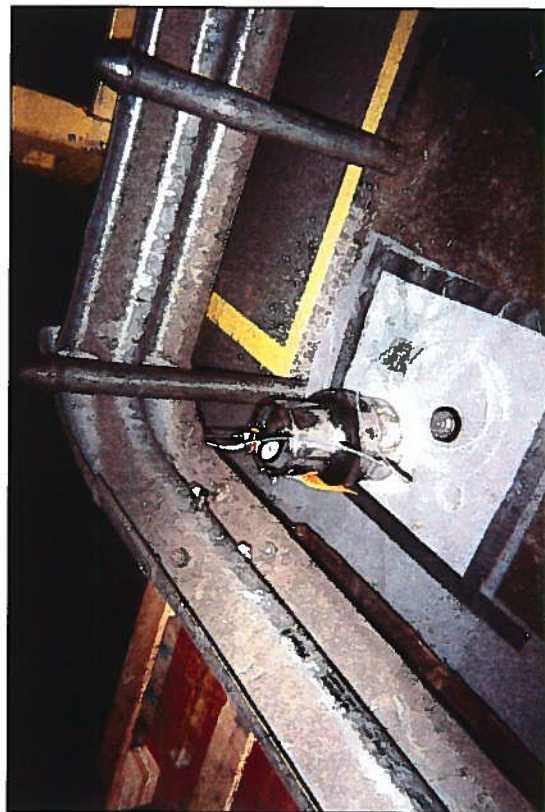
Photograph 17: Preparation of vapor point for purging.



Photograph 18: Final sample set-up with Summa canister.



Photograph 19: Sample point SV-13 with duplicate sample.



Photograph 20: Sample point SV-14 in Polymedco warehouse.

APPENDIX C
SOIL GAS SAMPLING LOGS

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-10 AA

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER NO. 1491
FLOW CONTROL K143

Laboratory Sample (Summa Canister)

Time Started: 08:12 Vacuum: 28.5 "Hg
Time Stopped: 16:12 Vacuum: 7 "Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-11, SS

Purging

Time Started: 8:15
Time Stopped: 8:20
Vol. Purged: 0.5 liters
Flow Rate: ~ 0.1 L/min

CANISTER N^o. 2965
FLOW CONTROLLER:
K328

Laboratory Sample (Summa Canister)

Time Started: 8:34 Vacuum: 30 "Hg ~~psi~~
Time Stopped: 16:34 Vacuum: 3.5 "Hg ~~psi~~

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-U, AA

N/A

Purging

~~Time Started: 08:05~~
~~Time Stopped: 16:07~~
~~Vol. Purged: _____ liters~~
~~Flow Rate: _____ L/min~~

CANISTER N^o. 6591
Flow
Controller: K352

Laboratory Sample (Summa Canister)

Time Started: 08:05 Vacuum: 30 "Hg psi
Time Stopped: 16:07 Vacuum: 4.5 "Hg psi

Field Sample

~~PID Calibration: _____~~
~~Time Started: _____~~
~~Time Stopped: _____~~
~~PID Reading: _____ ppm~~
~~He Reading: _____ %~~

N/A

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-12, SS

Purging

Time Started: 8:25
Time Stopped: 8:30
Vol. Purged: 0.5 liters
Flow Rate: 0.1 L/min

CANNISTER NO. 1519
FLOW CONTROL K119

Laboratory Sample (Summa Canister)

Time Started: 08:37 Vacuum: 30" Hg
Time Stopped: 16:38 Vacuum: 3.5" Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-12, AA

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER NO. 68
FLOW CONTROL K288

Laboratory Sample (Summa Canister)

Time Started: 10:15 Vacuum: 30 "Hg
Time Stopped: 18:15 Vacuum: 5.5 "Hg psi

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-13, SS

Purging

CANISTER N^o. 1425
FLOW CONTROL KUO

Time Started: 8:51
Time Stopped: 8:56
Vol. Purged: 0.5 liters
Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started: 09:01 Vacuum: 28" Hg
Time Stopped: 17:06 Vacuum: 3.5" Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-13, AA

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER NO. 1345
FLOW CONTROL 6519

Laboratory Sample (Summa Canister)

Time Started: 08:53 Vacuum: 30" Hg ~~24~~
Time Stopped: 10:10 Vacuum: 5" Hg ~~24~~

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-13 SS (DUP)

Purging

Time Started: 8:51
Time Stopped: 8:56
Vol. Purged: 0.5 liters
Flow Rate: 0.1 L/min

CANISTER NO. 0020
FLOW CONTROL K 3.54

Laboratory Sample (Summa Canister)

Time Started: 09:01 Vacuum: 30" Hg
Time Stopped: 11:06 Vacuum: 4.5" Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-14, SS

Purging

CANISTER N^o. 1286
FLOW CONTROL K187

Time Started: 9:20
Time Stopped: 9:29
Vol. Purged: 0.5 liters
Flow Rate: 0.1 L/min

Laboratory Sample (Summa Canister)

Time Started: 09:28 Vacuum: 30" Hg ~~psi~~
Time Stopped: 17:28 Vacuum: psi

Field Sample

PID Calibration:
Time Started:
Time Stopped:
PID Reading: ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-14, AA

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER NO. 1287
FLOW CONTROL K351

Laboratory Sample (Summa Canister)

Time Started: 09:13 Vacuum: 30" Hg
Time Stopped: 17:20 Vacuum: 4.5" Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SV-15, SS

Purging

Time Started: 9:40
Time Stopped: 9:45
Vol. Purged: 0.5 liters
Flow Rate: 0.1 L/min

CANISTER NO. 6574
FLOW CONTROL 5148

Laboratory Sample (Summa Canister)

Time Started: 09:50 Vacuum: 30" Hg ☒
Time Stopped: 16:56 Vacuum: 8" Hg psi

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading 0 %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: SU-15 AA

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER N° 1407
FLOW
CONTROL K356

Laboratory Sample (Summa Canister)

Time Started: 09:28 Vacuum: 30" Hg
Time Stopped: 16:55 Vacuum: 6" Hg psi

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: OUTDOOR 1

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER NO. 0433
FLOW CONTROL K223

Laboratory Sample (Summa Canister)

Time Started: 09:40 Vacuum: -30" Hg
Time Stopped: 17:50 Vacuum: 10.5" Hg

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

Soil Gas Sampling Log

Job No: 40256 Client: ISCP Properties
Project Location: Magna metals, Cortlandt Sampled By: BT / BZ
Date: April 5, 2007

Sample ID: OUTDOOR 2

Purging

Time Started: _____
Time Stopped: _____
Vol. Purged: _____ liters
Flow Rate: _____ L/min

CANISTER N^o. 2835
FLOW CONTROL IS 262

Laboratory Sample (Summa Canister)

Time Started: 10:09 Vacuum: 29" Hg psi
Time Stopped: 10:10 Vacuum: 5" Hg psi

Field Sample

PID Calibration: _____
Time Started: _____
Time Stopped: _____
PID Reading: _____ ppm
He Reading _____ %

APPENDIX D
ANALYTICAL DATA REPORT